2A NODE 1 MDM STATE - E. TRANSITIONING N1-1 TO SECONDARY FROM PRIMARY & N1-2 TO PRIMARY FROM STANDBY

        1.   VERIFY MDM STATES AND MDM IDs

PCS1   Node 1: C&DH: MDM N1-1
         | PRIMARY NCS MDM Node 1 |

        √STATE - Primary
        √MDM ID - N1-1

PCS1   Node 1: C&DH: MDM N1-2
         | SECONDARY NCS MDM Node 1 |

        √STATE - Standby
        √MDM ID - N1-2

+--+
| NOTE |
| If states are not correct, do not execute this procedure. |
| |
| √**MCC** |
+--+

        2.   COMMAND N1-1 TO SECONDARY (N1-2 SHOULD GO TO PRIMARY)

PCS1   Node 1: C&DH: MDM N1-1
         | PRIMARY NCS MDM Node 1 |

+--+
| NOTE |
| 1. Sending the following command will cause the loss of PCS1, |
| Early COMM, and OIU telemetry until OIU reconfiguration and |
| PCS2 reconnection are done. |
| |
| 2. Possible PDI DECOM Fail message. |
+--+

      'MDM Major State:'

      sel   Commands
      cmd N1-1_MDM_Xsitn_Second_State **Execute**

     √Frame Count - static (Loss of PCS1 telemetry)

      N1-2 should go to Primary in 20 seconds.

        3.   TELEMETRY RECOVERY ON PCS2

PCS2   After boot up, when taskbar appears at bottom of display
            sel Arrow directly above 'PCS' logo
            sel Start/Restart PCS CDS
            sel Icon to open PCS CDS Main Control Panel Window

√Status Box is green and 'Connected' is displayed in the PCSCDS
  Main Control Panel Window

> NOTE
> PCS2 connection to MDM is indicated by green in the Status
> Box and/or 'Connected' message displayed in the PCS2 CDS
> Main Control.

```
* ******************************************************************** *
*  If Status Box is not green, select 'Connect to MDM' icon  *
*    to reconnect.                                           *
*  If still no joy, close all displays and all iconified items and *
*    repeat this step.                                      *
*                                                          *
* √MCC if Status Box is still not green.                    *
* ******************************************************************** *
```

    4. <u>VERIFY N1-2 IS PRIMARY AND N1-1 IS SECONDARY</u>
PCS2   Node 1: C&DH: MDM N1-2
          | PRIMARY NCS MDM Node 1 |

    √Frame Count - incrementing

    'MDM Major State:'

    √STATE - Primary
    √MDM ID - N1-2

PCS2   Node 1: C&DH: MDM N1-1
          | SECONDARY NCS MDM Node 1 |

    √Frame Count - incrementing

    'MDM Major State:'

    √STATE - Secondary
    √MDM ID - N1-1

```
****************************************************** *
*  If States are not correct or no N1-2 telemetry *
*                                                 *
*     √MCC                                         *
****************************************************** *
```

5. <u>TELEMETRY RECOVERY ON EARLY COMM (GROUND ONLY)</u>

> <u>NOTE</u>
> Early COMM should reconnect to N1-2 MDM on the other Orb bus automatically in about 10 seconds after N1-2 MDM becomes Primary.

Node 1: C&DH: MDM N1-2
| PRIMARY NCS MDM Node 1 |

√Frame Count - incrementing

'MDM Major State:'

√MDM ID - N1-2
√MDM State - Primary

```
* ************************************************************************ *
*   If Frame Count is Static after 20 seconds from the moment     *
*     N1-2 becomes Primary (No Early COMM telemetry received) *
*                                                                 *
*      √MCC                                                       *
* ************************************************************************ *
```

6. <u>TELEMETRY RECOVERY ON OIU</u>

> <u>NOTE</u>
> Possible PDI DECOM Fail message.

CRT | SM 212 OIU |

BUS 3 BC - ITEM 11 EXEC
BUS 4 RT - ITEM 14 EXEC
Change OIU N1 Physical Device to N1-2 - ITEM 18 +<u>3</u> EXEC

CRT   Reload OIU FORMAT 2 - ITEM 1 +<u>2</u> EXEC

CRT | SM 210 NODE |

√PHY ID PRI MDM - N1-2
√STATE   - PRI
√FAIL   - blank
√FRM CTR   - incrementing